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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/765,398

01/28/2004

Kenji Mikami

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5514 7590 12/17/2008  
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EXAMINER

KAU, STEVEN Y

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

12/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/765,398	MIKAMI, KENJI	
	<b>Examiner</b>	<b>Art Unit</b>	
	STEVEN KAU	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Nov. 21, 2008 has been entered.

### ***Response to Amendment***

Applicant's amendment was received on 11/21/2008, and has been entered and made of record. Currently, claims 1, 3-5, 7-9 and 11-14 are pending for further examination in this Action.

### ***Specification***

The corrected or substitute specification was received on 1/9/2008. The specification is acceptable.

### ***Response to Remark/Arguments***

Applicant's arguments with respect to claims 1, 3-5, 7-9 and 11-14 have been fully considered and the reply to the Remarks/Arguments is in the following:

- Applicant's arguments, section "Claim Objection", page 6, Remarks, with respect to claim 1, 5 and 9 have been fully considered and are persuasive. The claim objection has been withdrawn from the record.
- Applicant's arguments, section "Response to Claim Rejection Under 35 U.S.C. § 112", page 7-8, Remarks, with respect to claims 9-12 have been fully considered and are persuasive. The rejection of claims 9-12 under 35 U.S.C. § 112 First Paragraph has been withdrawn.
- Applicant's arguments, "Response to Claim Rejections Under 35 U.S.C. § 101", Pages 8-9, Remarks, with respect to claims 9-12 have been fully considered and are persuasive. The rejection of claims 9-12 under 35 U.S.C. § 101 has been withdrawn from the record.
- Applicant's arguments with respect to claims 1, 3-5, 7-9 and 11-14 have been fully considered but are not persuasive.

Applicant argues, "The Official Action asserts Sugimoto discloses an image forming apparatus comprising, inter alia, a processing unit for applying a reduction processing which suppresses the amount of colorant to a thin line in a graphic. Specifically, the Official Action cites to the disclosure at column 13, line 46 through column 14, line 16 of Sugimoto as disclosing determining a toner save level in accordance with line width.

Applicant respectfully submits, however, that Sugimoto does not teach or suggest that the reduction processing reduces, based upon a user instruction, an

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amount of colorant forming the thin line contained in the graphical object to a first amount of the colorant, when a thin-line correction mode is turned on, and that the reduction processing reduces, based upon a specified value, an amount of colorant forming the thin line contained in the graphical object to a second amount of the colorant that is more than the first amount when the thin-line correction mode is not turned on, as recited in independent Claims 1, 5, and 9. In fact, Sugimoto appears to disclose that no toner save operation occurs when a toner save level is not specified. For example, in column 8, lines 44-52, which is specifically referred to in the Official Action, Sugimoto discloses that if the toner save level is not specified, then the lookup table with no toner save is selected”, page 11, Remarks.

In reply, the examiner respectfully disagrees with the above argument. Sugimoto discloses toner save processes of Figs. 6-9 with steps for judging toner save level for character, for graphic data, line width and resolution, etc. Amount of colorant is specified based on user's instruction. Sugimoto discloses a menu screen display is provided for user's instruction of what toner save level a user specifies. It is obvious that if a user selects “No Toner Save”, or a “medium” level, a most normal case (col 6, line 63 to col 7, line 3), for toner saving before and then specifies “small” toner saving level later, than the second amount of colorant specified is less than the first amount of colorant for printing; since Sugimoto discloses multi-levels of toner save levels and one is less than the other by user's choice. Thus, the limitation of “the reduction processing reduces, based upon a specified value, an amount of colorant forming the thin line

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contained in the graphical object to a second amount of the colorant that is more than the first amount when the thin-line correction mode is not turned on” is anticipated by Sugimoto. In addition, there is no definition of “thin-line” specified in either the disclosure and in the claim, judgment of “thin-line” is objective. “While it is appropriate to use the specification to determine what applicant intends a term to mean, a positive limitation from the specification cannot be read into a claim that does not itself impose that limitation. A broad interpretation of a claim by USPTO personnel will reduce the possibility that the claim, when issued, will be interpreted more broadly than justified or intended. An applicant can always amend a claim during prosecution to better reflect the intended scope of the claim”, MPEP 2105.

The examiner also references the applicant to the claims rejection section below for the explanation on how the prior art references read on the amended claims.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4, 5, 7, 8, 9 and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugimoto (US 7,298,522).

Regarding claim 1.

Sugimoto discloses an image forming apparatus comprising:  
a discrimination unit (**e.g. Image Distinguishing Module of Fig. 2**) for discriminating a type (**such character/graphic**) of object contained in input data (**image distinguishing module 12 is for distinguishing between a character, a graphic and an image of print target information, col 5, lines 32-53**); and  
a processing unit (**e.g. a CPU of host computer 1 of Fig. 1, col 4, lines 45-50**) for applying reduction processing (**e.g. toner saving processing of Figs. 6-9, col 8, lines 21-26**) to a thin line (**e.g. a character/a graphic/line width**) contained in a graphical object (**e.g. print target data**) using a result of discrimination by said discrimination unit (**e.g. such characters, graphics, line width and resolution, etc are judged or discriminated in the toner saving process, col 8, line 21 to col 9, line 57**),  
wherein the reduction processing reduces, based upon a specified value (**e.g. one of toner save levels of Figs. 3-5, col 6, line 63 to col 7, line 3**), an amount of colorant forming the thin line contained in the graphical object to a first amount of the colorant (**e.g. “medium” toner save level is specified most in a normal case, and the processes shown in Figs 6-9 discloses a complete process of r judging character/graphic/line width/resolution and toner save level associates with Fig. 5 for toner saving or reduction as discussed above, col 8, line 21 to col 9, line57**),  
and  
wherein the reduction processing reduces an amount of colorant forming the thin line contained in the graphical object to a second amount (**“small” toner save level**) of the

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colorant that is less than the first amount (“**medium” toner save level**), when a thin-line correction mode is turned on (**Step S32 of Fig. 7 and Step S52 of Fig. 8**) based upon a user instruction (**e.g. a menu screen display is provided for user's instruction of what toner save level a user specifies; it is obvious that if a user selects a “no toner save” or a "medium" level, a most normal case, for toner saving before and then specifies “small” toner saving level later, than the second amount of colorant specified is less than the first amount of colorant for printing; since Sugimoto discloses multi-levels of toner save levels and one is less than the other by user's choice, thus, this limitation is taught and suggested by Sugimoto**).

Regarding claim 3, in accordance with claim 1.

Sugimoto discloses wherein said processing unit does not execute application of the reduction processing to an object of a certain type (**e.g. no toner save is not specified - Step 31 of Fig. 7, col 8, lines 44-52, and Step 51 of Fig. 8, col 9, lines 6-11**).

Regarding claim 4, in accordance with claim 1.

Sugimoto discloses wherein said discrimination unit discriminates the type of object based upon an instruction contained in image data described in page description language (**e.g. information or data transferred between the printer and host of Fig. 1 is in accordance with page description language, printer control language, etc. col 5, lines 6-12**).

Regarding claim 5.



Claim 5 is directed to a method claim which substantially corresponds to operation of the device in claim 1, with method steps directly corresponding to the function of device elements in claim 1. Thus, claim 5 is rejected as set forth above for claim 1.

Regarding claim 7, in accordance with claim 5.

Claim 7 recites identical features as claim 3, except claim 7 is a method claim. Thus, arguments similar to that presented above for claim 3 are also equally applicable to claim 7.

Regarding claim 8, in accordance with claim 7.

Claim 8 recites identical features as claim 4, except claim 8 is a method claim. Thus, arguments similar to that presented above for claim 4 are also equally applicable to claim 8.

Regarding claim 9.

Claim 9 is directed to a computer program stored on a computer-readable medium claim which substantially corresponds to operation of the device in claim 1, with processing steps directly corresponding to the function of device elements in claim 1. Thus, claim 9 is rejected as set forth above for claim 1.

Regarding claim 11, in accordance with claim 9.

Claim 11 recites identical features as claim 3, except claim 11 is a computer program product claim. Thus, arguments similar to that presented above for claim 3 are also equally applicable to claim 11.

Regarding claim 12, in accordance with claim 9.

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Claim 12 recites identical features as claim 4, except claim 12 is a computer program product claim. Thus, arguments similar to that presented above for claim 4 are also equally applicable to claim 12.

Regarding claim 13, in accordance with claim 1.

Sugimoto discloses wherein said reduction processing is applied to a thin line having a designated color (e.g. **providing Sugimoto's teaching of printing thin lines of width between 1 to or larger than 1 point, but smaller than 2 point of graphic and color conversion mode selection module selects a color conversion module corresponding to toner save level, this limitation is anticipated by Sugimoto; col 6, lines 32-41 and col 13, line 47 through col 14, line 16**).

Regarding claim 14, in accordance with claim 1.

Sugimoto discloses wherein the colorant is toner (**Sugimoto discloses a color printer of Fig.1 which the colorant is a toner, Figs 15-16, col 16, line 53 through col 17, line 9**).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Kau whose telephone number is 571-270-1120 and fax number is 571-270-2120. The examiner can normally be reached on M-F, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Steven Kau/  
Examiner, Art Unit 2625  
12/15/2008

/David K Moore/  
Supervisory Patent Examiner, Art Unit 2625